

ANTENNA CIRCUIT AND WIRELESS COMMUNICATION DEVICE

ABSTRACT OF THE DISCLOSURE

The present invention relates to an antenna circuit that can achieve optimal matching according to an external environment of an antenna without interrupting communication in wireless transmission and reception. The antenna circuit of a cellular phone is provided with a plurality of matching circuits between a transmitting unit or a receiving unit and the antenna. A control unit detects operating conditions of the cellular phone such as a waiting mode, a normal voice call mode or a hands-free call mode as the external environment of the antenna. Each matching circuit has an impedance to optimize the antenna matching according to the respective conditions.